TA705.3P47P42006c.1

MACTEC

October 27, 2006

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Mr. Afshin Rouhani
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118

Report
Permanente Creek Planning Study – Feasibility Geophysical Investigation
Santa Clara County, California
Agreement No. A30475

Dear Mr. Rouhani,

This letter reports the findings of MACTEC Engineering and Consulting, Inc.'s (MACTEC) seismic refraction survey and test boring at two sites (Dam Sites 2 and 3) within the Hanson Permanente Cement Quarry in Santa Clara County, California. The dam sites are located within the steep ravine of Permanente Creek. The objective of this investigation was to determine overburden thickness and the depth and excavation characteristics (rippability) of bedrock beneath the two sites. This information will be used to assess the foundation conditions in two areas where a flood control dam is being considered by the Santa Clara Valley Water District (the District).

Our investigation was performed in accordance with our agreement with the District and our proposal of May 10, 2006.

SEISMIC REFRACTION SURVEYS

Field Procedures

The seismic refraction field work was performed in two stages. On May 25, 2006, a MACTEC geotechnical engineer specializing in dam construction visited both sites along with a MACTEC geophysicist, a District representative, and a wildlife biologist. The purpose of the visit was to examine the Permanente Creek ravine topography in detail to determine the best location for a dam alignment at each of the two sites. Additionally, the team scouted access routes and marked the seismic line locations so they could be inspected by the biologist as part of the procedure to obtain a Categorical Exemption (CE) environmental clearance, which was needed to perform field work in the District watershed area.

On August 22 – 23, 2006 a two-person crew led by a professionally-registered MACTEC geophysicist returned to the sites to perform the seismic refraction surveys. Seismic refraction data were obtained along two perpendicular lines at each site for a total of four seismic lines (Figure 1). Seismic spreads were composed of 24 geophones placed at 20-foot intervals. Shotpoints were

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placed 20-feet off each end geophone for a nominal seismic spread length of 500 feet, which corresponds to an investigation depth of approximately 100 feet below ground surface (bgs). Additional shotpoints were placed in the line interior as site conditions allowed for a total of five to six shotpoints per line.

Seismic energy was generated with a 20-lb sledgehammer, which was used to strike a metal plate placed on the ground at the shotpoint locations. Seismic energy was detected with Mark Products 14-Hz geophones and was recorded using a Geometrics SmartSeis Model S-24 24-channel signal enhancement seismograph. Signal enhancement was achieved by "stacking," a procedure whereby energy from multiple repeated hammer blows is stored in the seismograph and combined (added) before the final seismic record is produced. Stacking increases signal amplitude, enabling the Compressional (P-) wave arrivals to be more easily identified ("picked"). Up to 20 hammer blows were used per shotpoint.

Seismic data were output in the field as paper records for quality control and to provide a fail-safe data backup. Additionally, the data were recorded to the seismograph's computer memory and copied to disc for digital backup. Compressional (P-) wave arrival times were picked from field records and time distance (T/D) plots were prepared to estimate the P-wave velocities and assess the number of velocity layer detected. Shotpoint locations were marked in the field using pin flags. A Global Positioning System (GPS) was used to map the seismic lines at the few locations where adequate satellite signals could be obtained; because of the dense tree canopy, the GPS could not record the location of every shotpoint.

After the seismic data were obtained, the geophysicist performed a topographic leveling survey using a survey rod and an optical hand-level sighting tool to measure the ground surface topography along each seismic line. The topography data were incorporated into the seismic data analysis to produce terrain-corrected seismic velocity profiles.

Data Processing and Analysis

Upon returning to the office, the MACTEC geophysicist picked P-wave arrival times for each geophone. The arrival time data, along with the geophone locations and topography data, were input into SIPT2, a computer modeling program that calculates velocity layer models for each seismic line. SIPT2 is an inverse modeling program that uses ray-tracing procedures, simulating P-wave travel paths through subsurface layers, to generate layered velocity models that fit the field data. The program output consists of cross-sections showing thickness and the computed average velocity for the detected subsurface layers.

Additional computer modeling was performed using SeisImager, a tomographic modeling program that produced more geologically reasonable profiles for the seismic lines that spanned the steep, v-shaped, Permanente Creek ravine. As opposed to the layer-based modeling procedure used by SIPT2, the tomography procedure models the subsurface by establishing a grid and calculating an individually separate velocity for each grid cell.

It should be noted that the seismic refraction method and the modeling procedure incorporate three assumptions. First, the subsurface consists of relatively flat-lying (less than 20 degrees from horizontal) and continuous velocity layers within a seismic line. Second, the P-wave velocity is relatively uniform within each layer. Third, the layer velocities increase with depth. The refraction method cannot provide detailed information about local variations in material velocity and rock condition. Rather, the models represent average velocity for each layer; there may be localized areas where the seismic velocity is greater or less than the value presented.

Results

The locations of the four seismic lines, designated SL-1 through SL-4, are shown on Figure 1. Lines SL-1 and SL-2 are at the eastern site (Dam Site 2), and lines SL-3 and SL-4 are at the western site (Dam Site 3). Lines SL-1 and SL-3 are positioned in a roughly east-west direction along the axis of the Permanente Creek ravine; SL-2 and SL-4 are cross-lines oriented perpendicular to the ravine axis. Seismic velocity layer models for the seismic lines are shown on Figures 2 through 5.

Taking the two sites together, MACTEC identified three velocity layers. The layers are designated, from top to bottom, V_1, V_2, and V_3, and they generally mimic the ground surface topography. MACTEC has interpreted Layers V_2, and V_3 which occur at depths ranging from 0 to 13 feet, to represent bedrock. In general, bedrock is shallower towards the bottom of the ravines and becomes progressively deeper upslope. The velocity layer characteristics described further below and are summarized afterward in Table 1.

Layer V_1 is a 0- to 13-foot thick low-velocity layer (approximately 1,300 to 1,400 feet per second [fps]) that is interpreted to represent soil. V_2 is a 3- to 13-foot thick layer exhibiting a velocity ranging from 8100 to 8,700 fps, which MACTEC has interpreted to represent weathered bedrock. Layer V_2 is present only at the westernmost site (Dam Site 3); its absence from Dam Site 2 is attributed to natural geologic variation or differences in weathering and erosion processes between the two the sites. Layer V_3 exhibits a velocity ranging from 10,800 to 13,700 fps. Occurring at depths ranging from 0 to 42 feet, Layer V_3 is interpreted to represent less-weathered bedrock.

Table 1. Summary of Permanent Creek Seismic Survey Results

Layer Designation	Interpretation	Dam Site 2			Dam Site 3		
		Depth (ft)	Thickness (ft)	Velocity (fps)	Depth (ft)	Thickness (ft)	Velocity (fps)
V_1	Soil	0	0 - 13	1,300	0	3 – 13	1,300 to 1,400
V_2	Weathered Bedrock	*Layer V_2 was not detected at Site 2.*			2 - 13	7 40	8,100 & 8,700
V_3	Bedrock	0 - 13	(bottom of model; no thickness calculated)	10,900 & 13,600	13 - 42	(bottom of model; no thickness calculated)	10,800 & 13,700

Conclusions

The refraction survey data indicate that bedrock is present at a depth of 13 feet or less at both sites. In general, bedrock is shallower towards the bottom of the ravines and becomes progressively deeper upslope, ranging in depth from 0 feet, where it is exposed in the creek bed at Dam Site 2, to 13 feet towards the top of the ravine at both sites. The D9N Ripper Performance Chart *(Caterpillar Performance Handbook, Edition 19, October 1998, p 87)* classifies the weathered bedrock (Layer V_2) as "marginally rippable" and hard bedrock (Layer V_3) as "non-rippable." A copy of the Ripper Performance Chart is presented on Figure 6. MACTEC attributes the absence of a lower-velocity "weathered bedrock" layer (Layer V_2) from Dam Site 2 to natural geologic variation in bedrock properties or to differences in the erosion process between the two sites. It is MACTEC's opinion that weathered bedrock is present at Dam Site 2 but it a layer that is too thin to be detected. MACTEC also observed that seismic lines SL-1 and SL-3, located at the base of the ravine at the two sites, exhibit somewhat higher bedrock velocity than the lines SL-2 and SL-4, which cross the ravine. This velocity anisotropy maybe related to the geologic structure of the bedrock, or it may be an artifact of the steep terrain's affect on the modeling process.

TEST BORING

Field Procedures

Originally, two test borings had been planned – one at each of the two dam sites. However, physical access to the planned drilling location at Dam Site 3 was determined to be impractical within the scope of this investigation. Consequently, a boring was drilled only at Dam Site 2. The location of the boring, as shown in Figures 1 and 3, was along Seismic Line SL-2, approximately 55 feet to the east of the centerline of Permanente Creek.

The Site 2 boring was drilled with a rubber-tracked Rhino vibrahammer-powered hollow-auger drill rig, operated by Gregg drilling. Disturbed soil and rock samples were collected from the auger cuttings or by using a Standard Penetration Test sampler advanced by the vibrahammer. Upon completion of drilling, the boring was backfilled with bentonite. A MACTEC senior geotechnical technician logged the boring and retained the samples for visual classifications.

Results

The Site 2 boring log is presented in Figure 7. The soil and rock types encountered have been described in accordance with the Unified Soil Classification System, Figure 8, and the rock classification criteria, Figure 9, respectively.

The test boring at Dam Site 2 encountered about 4 feet of soil cover over bedrock. The soil cover was hard clay with sand and some gravels. The underlying bedrock consisted of about 3 to 4 feet of deeply weathered metasandstone and greenstone. The greenstone extended to the depth of the boring (24 feet bgs). No groundwater was encountered during drilling.

Conclusions

Both dam sites are in the steep sided ravine occupied by Permanente Creek. As such, the gravelly soil cover on the ravine slopes is generally only a few feet thick. The narrow creek channel alluvium consists of abundant rock fragments and coarse gravel, mostly limestone, sandstone, chert, and greenstone.

Bedrock at both sites consists mostly of greenstone, a dense, moderately fractured hard altered basalt or andesite that is commonly deeply weathered at the surface. Inclusions and interbeds of metamorphosed greywacke sandstone are also present; however, according to the 1996 geologic evaluation by the District, both sites are within a northwest-southeast trending band of greenstone with most of the ridge upslope to the southwest being underlain by metasandstone and metashale.

Both the meta sedimentary rocks and the greenstones are part of the Franciscan Complex of late Jurassic to early Cretaceous age that is the dominant bedrock for the Santa Cruz Mountains and the Coast Ranges geomorphic province of California. Intensely folded and faulted from past tectonic plate subduction and compression, the Franciscan extends throughout the Coast Ranges from Santa Barbara to as far north as the California/Oregon border. Rock types within the Franciscan consist of greywacke sandstone, shale, altered volcanic rocks, chert, limestone, and high to low grade metamorphic rocks.

Comparison of the refraction survey results indicates good correlation with the results of Boring Site 2. The low velocity layer V1 for both Profiles SL-1 and SL-2 of 1300 feet per second (fps) ranges from the surface down to about 4 to 7 feet that compares with the 4 to 8 foot interval of soil and weathered sandstone in the boring. The higher velocity V3 zone of 13,600 fps in SL-1 and 10,900 fps in SL-2 also compares well with the harder greenstone bedrock encountered below 20 feet in the boring. Although the refraction results indicate little or no V2 zone between V1 and V3, it may be obscured by the transition from weathered to fresh greenstone that includes some hard greenstone fragments.

CLOSURE

We hope these results meet with your needs for the project. If we can be of further assistance or provide you with any additional information, please contact one of the undersigned.

Sincerely,
MACTEC Engineering and Consulting, Inc.

Roark W. Smith
By DWQ with permission
Roark W. Smith, GP 987
Senior Geophysicist

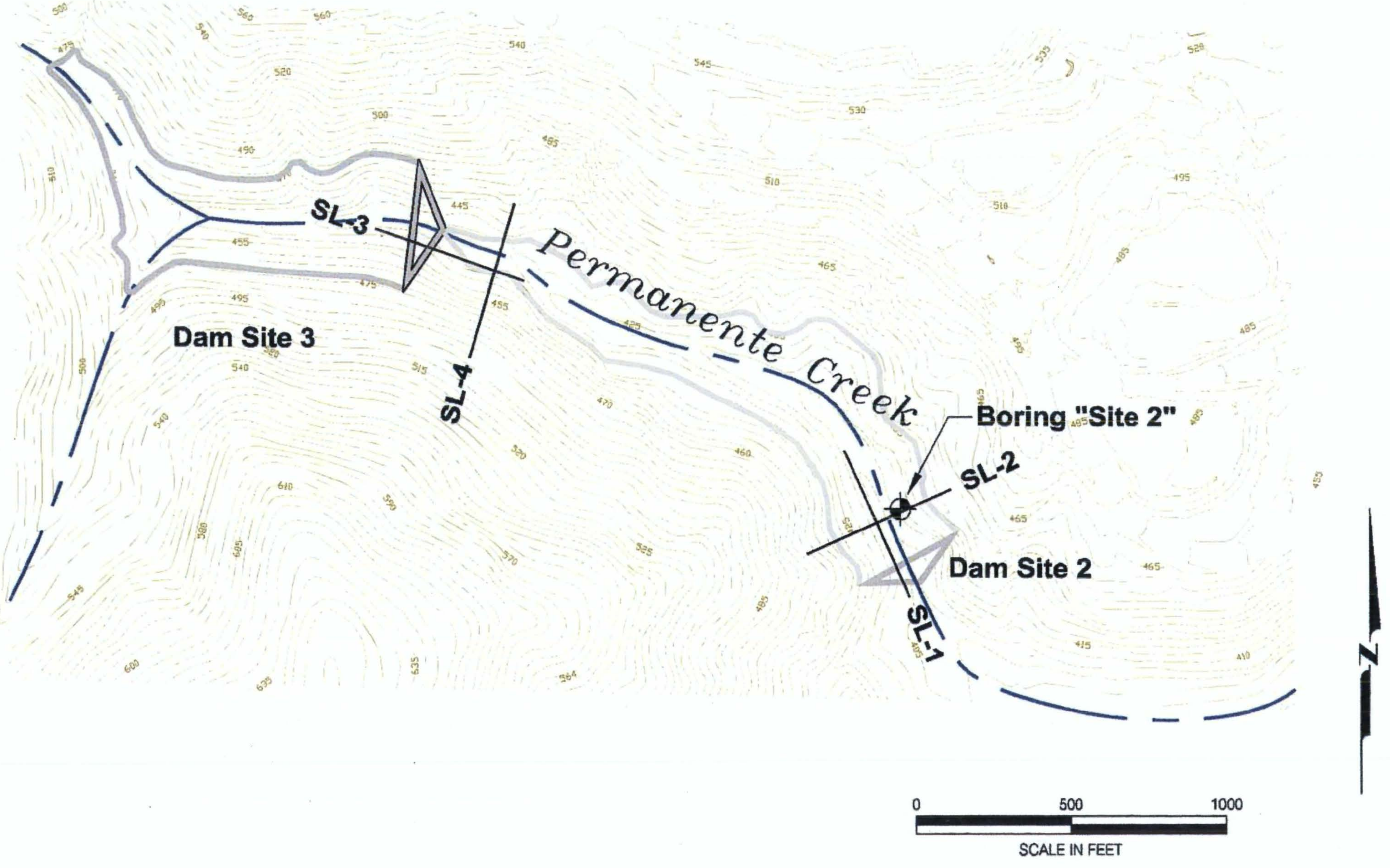
Donald W. Quigley
Donald W. Quigley, P.E., G.E.
Senior Principal Engineer

DONALD WALKER QUIGLEY
703
EXP 9-30-07

Attachments:

Figure 1, Seismic Line Locations
Figure 2, Seismic Refraction Velocity Profile SL-1, Dam Site 2
Figure 3, Seismic Refraction Velocity Profile SL-2, Dam Site 2
Figure 4, Seismic Refraction Velocity Profile SL-3, Dam Site 3
Figure 5, Seismic Refraction Velocity Profile SL-4, Dam Site 3
Figure 6, D9N Caterpillar Performance Chart
Figure 7, Log of Boring SITE 2
Figure 8, Soil Classification Chart and Key to Test Data
Figure 9, Physical Properties Criteria for Rock Classification

FIGURES



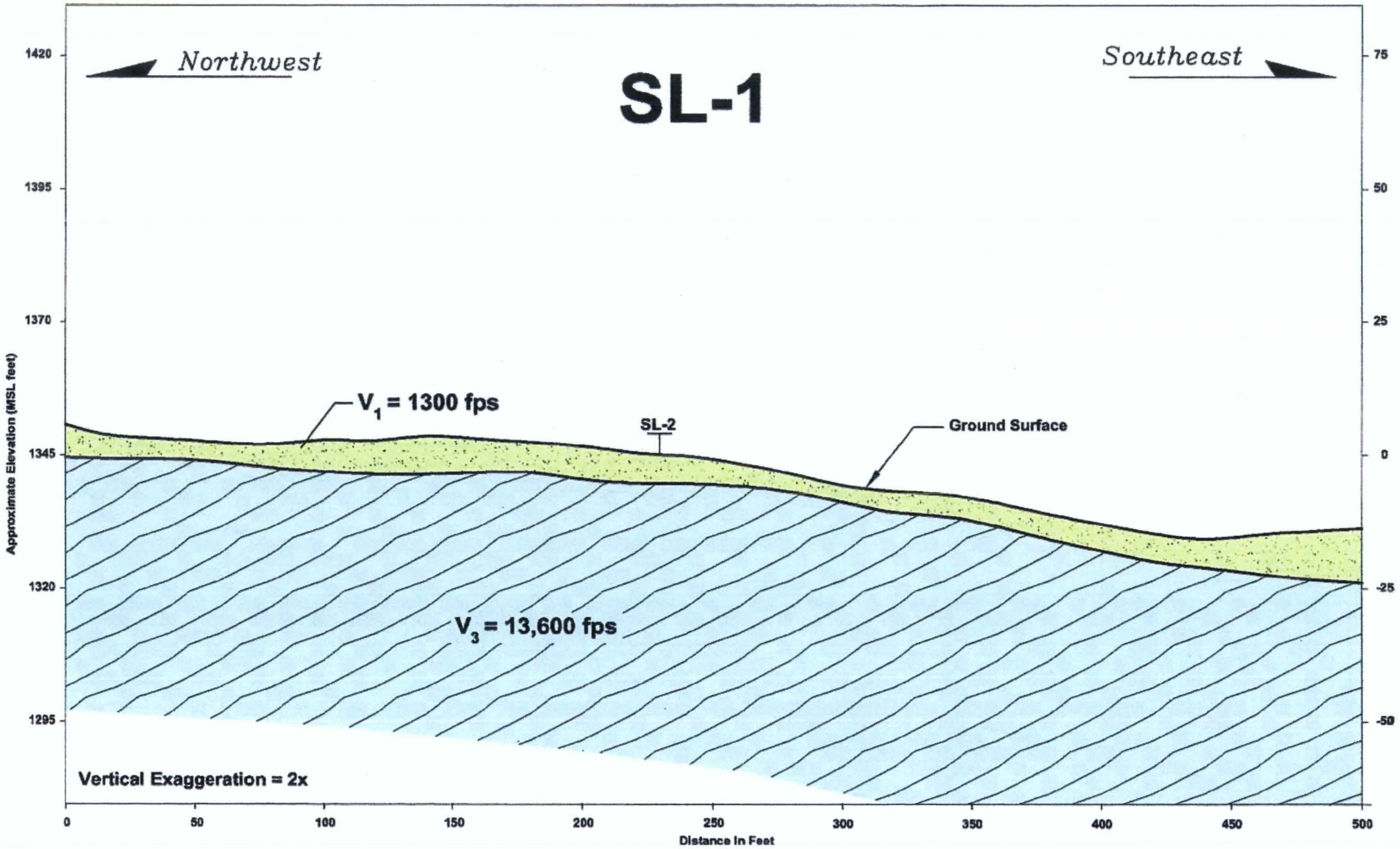
MACTEC

Seismic Line Locations
Permanente Creek Flood Planning Study
Santa Clara County, California

Figure
1

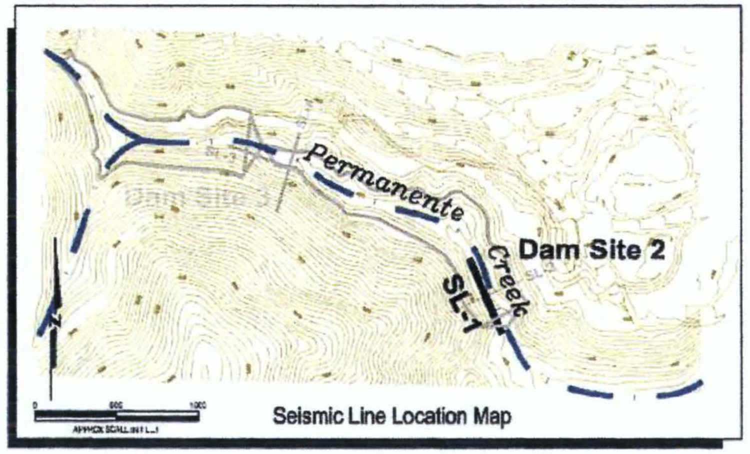
DRAWN	JOB NUMBER	APPROVED	DATE	REVISED DATE
Rws	4096064633 02	10/27/06	10/11/06	

4096064002003_FIG1.DWG 40.0
20061027.0920



EXPLANATION

V_1 = 1300 fps	Apparent P-wave velocity (feet per second) of velocity Layer 1
V_3 = 13,600 fps	Apparent P-wave velocity (feet per second) of velocity Layer 3



Seismic Line Location Map

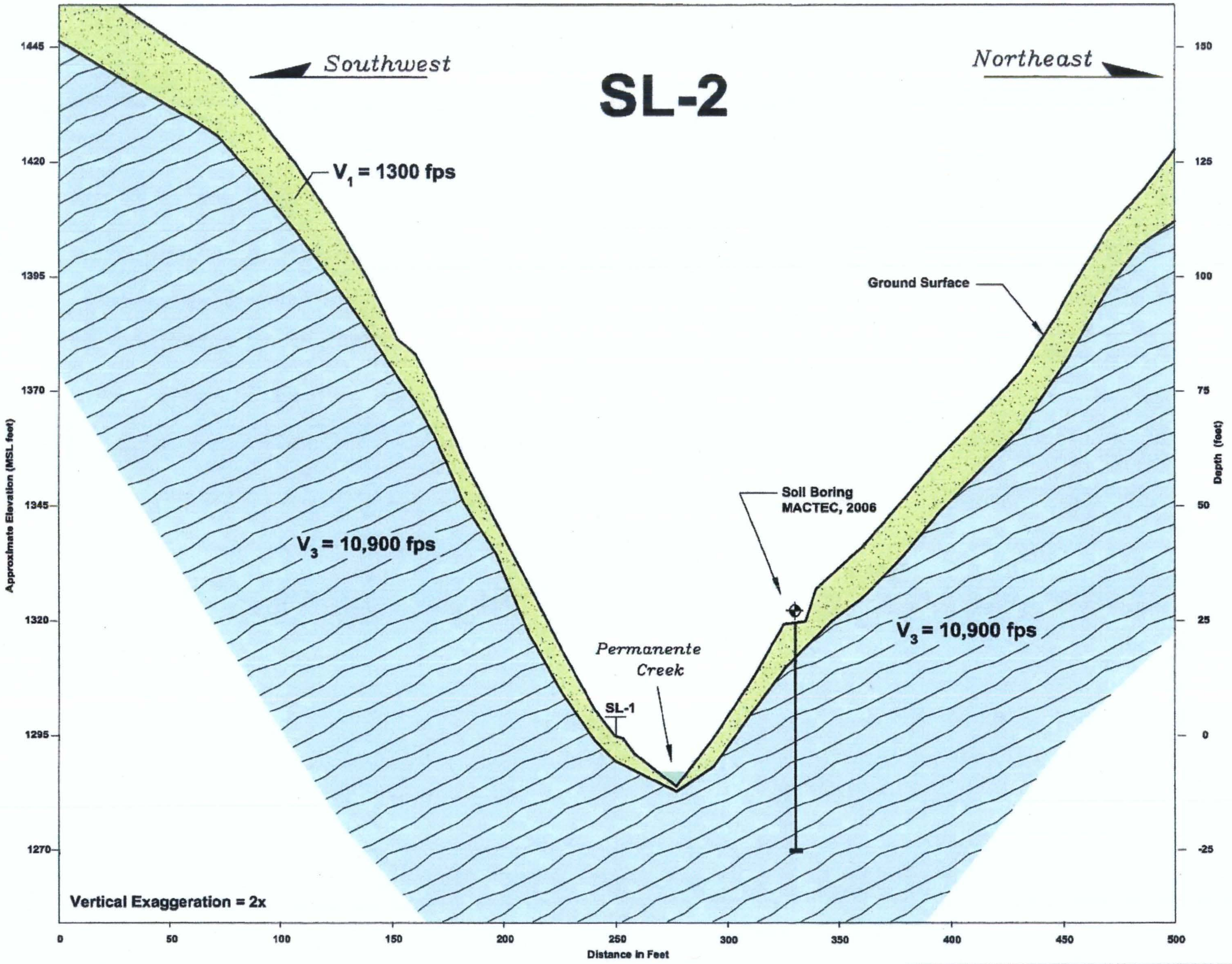
MACTEC

Seismic Refraction Velocity Profile SL-1
Dam Site 2
Permanente Creek Planning Study
Santa Clara County, California

FIGURE
2

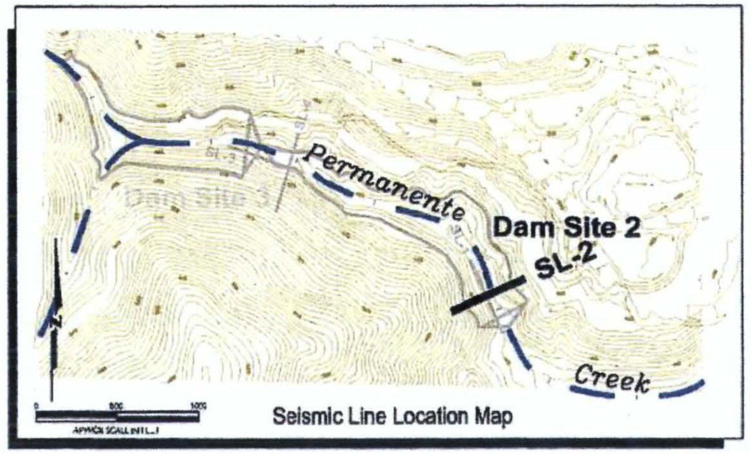
DRAWN	JOB NUMBER	CHECKED	CHECKED DATE	APPROVED	APPROVED DATE
Rws	4090064633 02		10/10/06	DWQ	10/27/06

4096064002001_FIG2.DWG 40.0
20061027.1446



EXPLANATION

V_1 = 1300 fps	Apparent P-wave velocity (feet per second) of velocity Layer 1
V_3 = 10,900 fps	Apparent P-wave velocity (feet per second) of velocity Layer 3
⌖	Soil Boring (MACTEC, 2006)



Seismic Line Location Map

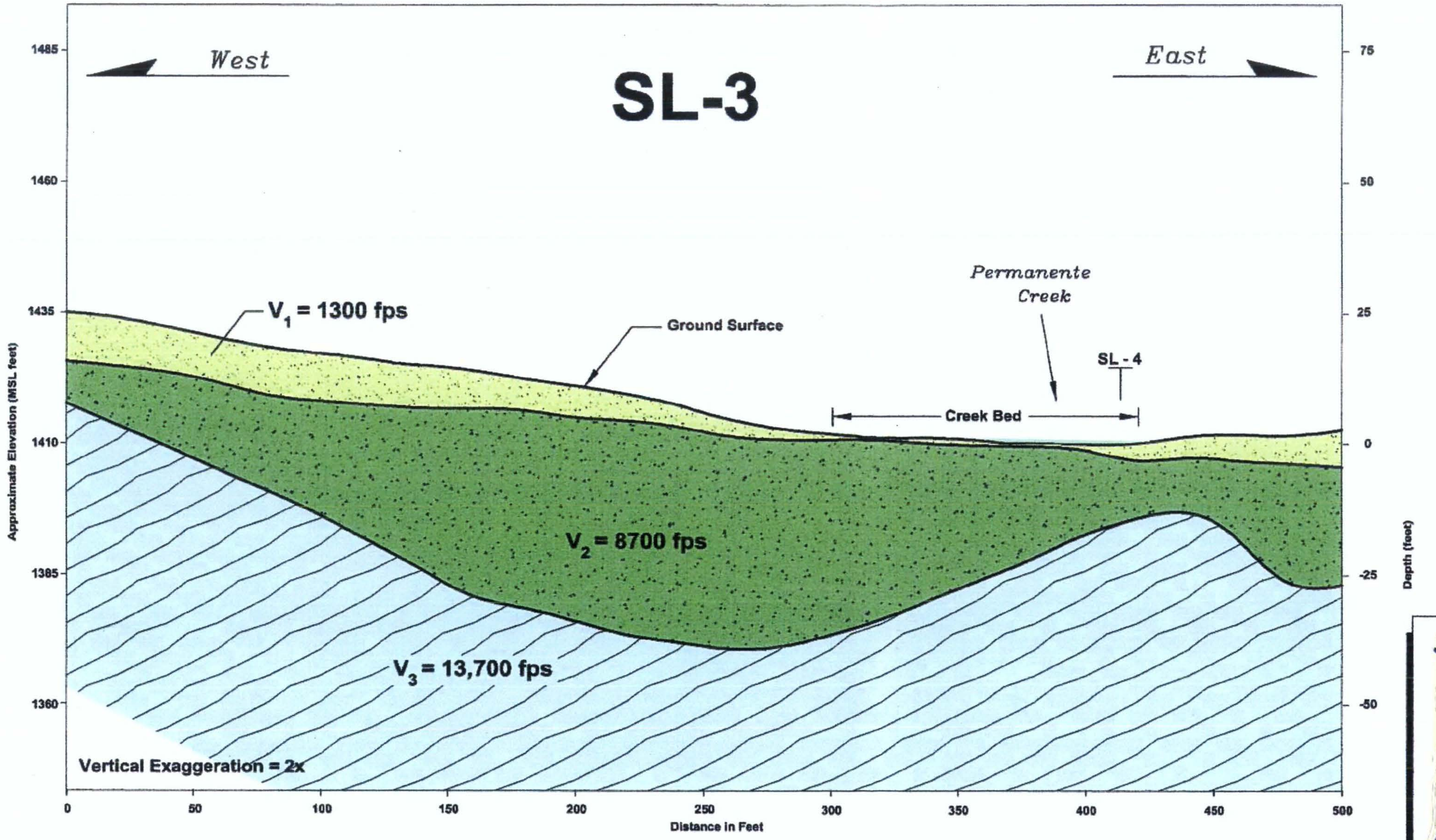
MACTEC

Seismic Refraction Velocity Profile, SL-2
Dam Site 2
Permanente Creek Planning Study
Santa Clara County, California

FIGURE
3

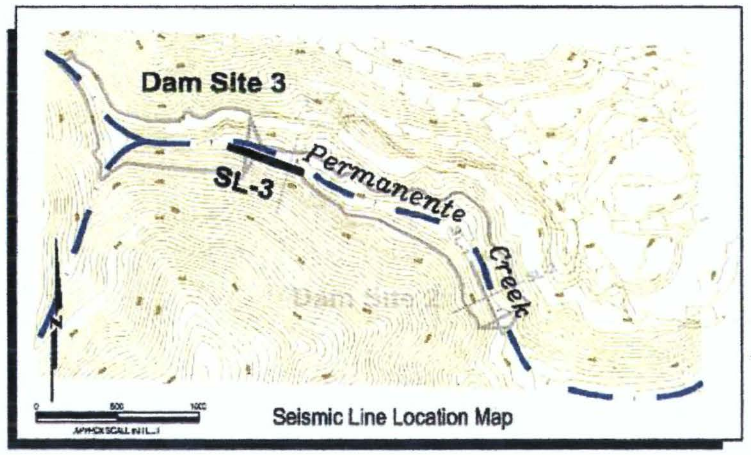
DRAWN	JOB NUMBER	CHECKED	CHECKED DATE	APPROVED	APPROVED DATE
Rws	4086064633 02		10/10/06	DRC	10/27/06

4096064002002_FIG3.DWG 40.0
20061027.0926



EXPLANATION

V_1 = 1400 fps	Apparent P-wave velocity (feet per second) of velocity Layer 1
V_2 = 8100 fps	Apparent P-wave velocity (feet per second) of velocity Layer 2
V_3 = 10,800 fps	Apparent P-wave velocity (feet per second) of velocity Layer 3



Seismic Line Location Map

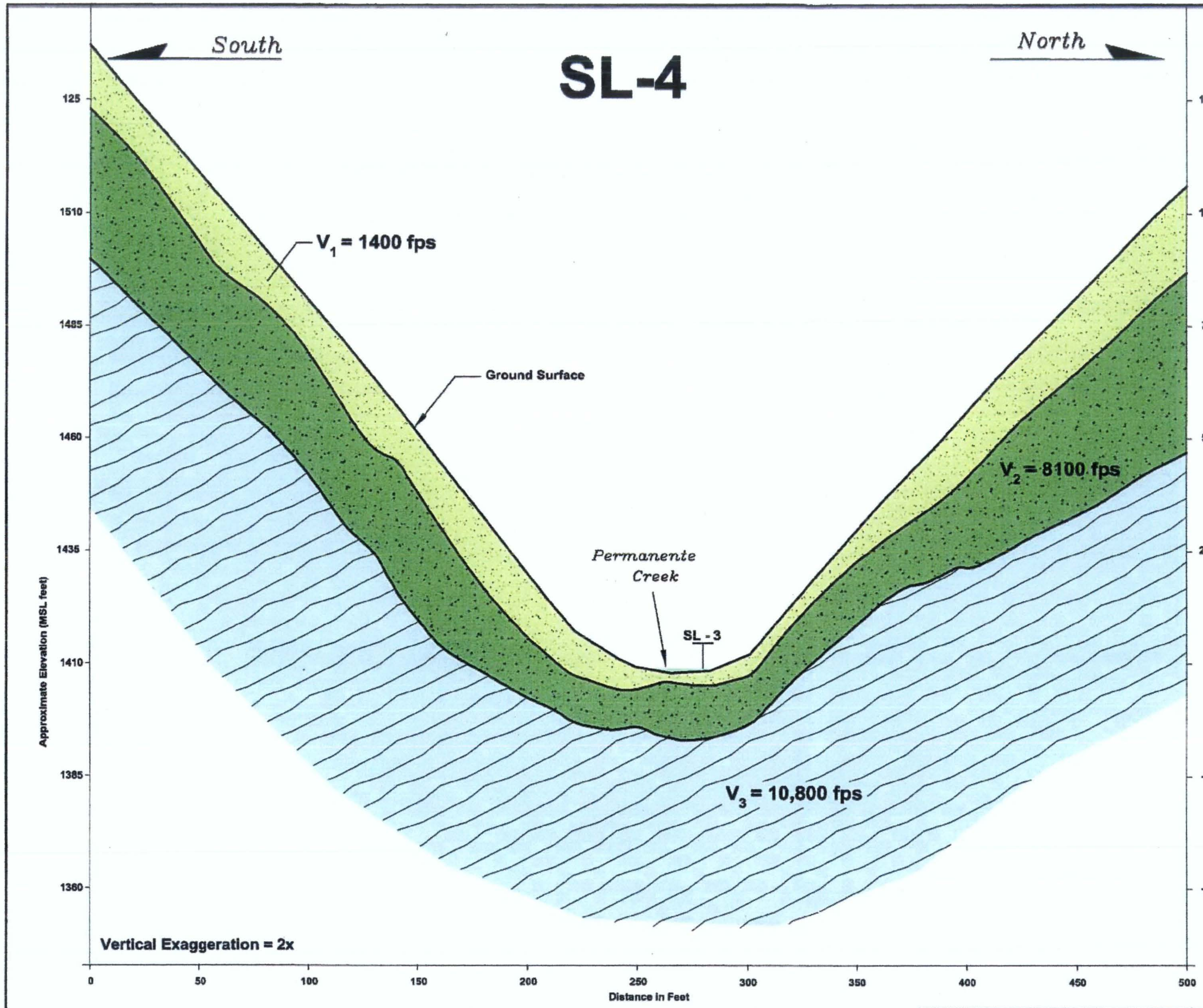
MACTEC

Seismic Refraction Velocity Profile SL-3
Dam Site 3
Permanente Creek Planning Study
Santa Clara County, California

FIGURE
4

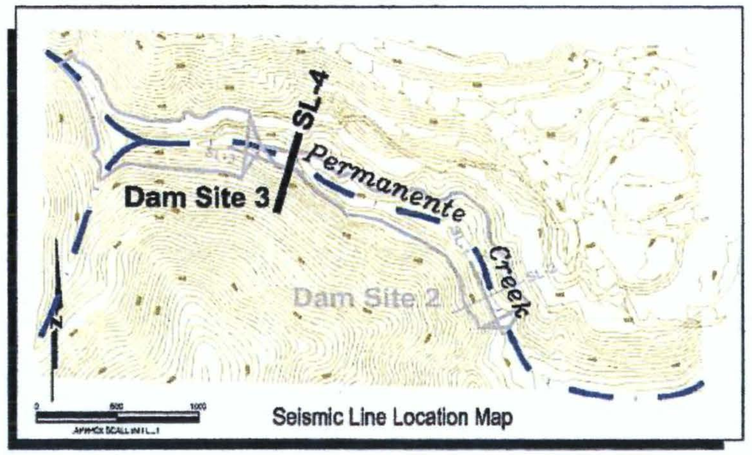
DRAWN	JOB NUMBER	CHECKED	CHECKED DATE	APPROVED	APPROVED DATE
Rws	4090064633 02		10/10/06	DWR	10/27/06

4096064002004_FIG4.DWG 40.0
20061013.1043



EXPLANATION

V_1 = 1400 fps	Apparent P-wave velocity (feet per second) of velocity Layer 1
V_2 = 8100 fps	Apparent P-wave velocity (feet per second) of velocity Layer 2
V_3 = 10,800 fps	Apparent P-wave velocity (feet per second) of velocity Layer 3



Seismic Line Location Map

4096064002005_FIG5.DWG 40.0
20061013.1058

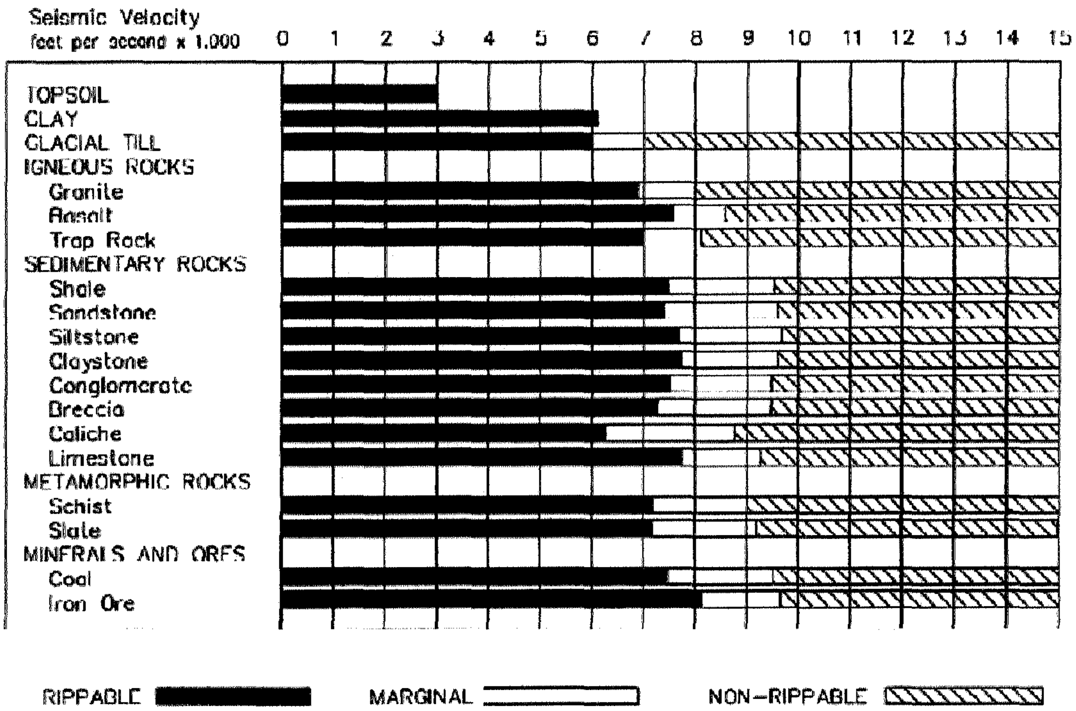
MACTEC

Seismic Refraction Velocity Profile SL-4
Dam Site 3
Permanente Creek Planning Study
Santa Clara County, California

FIGURE
5

DRAWN	JOB NUMBER	CHECKED	CHECKED DATE	APPROVED	APPROVED DATE
Rws	4090064633 02		10/10/06	DWR	10/27/06

D9N Ripper Performance
Multi or Single Shank No. 9 Ripper
Estimated by Seismic Wave Velocities



Reference: Caterpillar Performance Handbook, Edition 19, October 1988, p 87

MACTEC

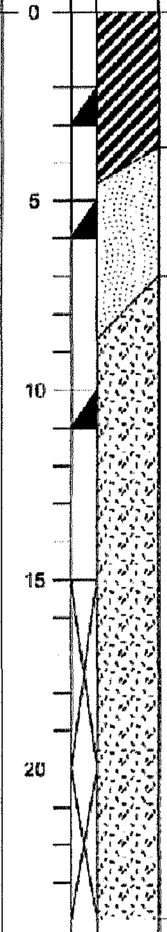
D9 Caterpillar Performance Chart
Permanente Creek Planning Study
Santa Clara County, California

FIGURE
6

DRAWN	JOB NUMBER	CHECKED	CHECKED DATE	APPROVED	APPROVED DATE
Rws	4096064633 06		10/10/06		10/27/06

4096064633 06_FIG6.DWG 40.0
20061013.1121

Date 8/24/06
Equipment Rino
Drilling Method Vibrahammer w/ 4" Hollow Auger
Sampler Vibrahammer
Hammer Weight ____ **Drop** ____
Logged by J. Phaby **Datum** ____
Surface Elevation ____



Other Tests/Drilling Notes	Moisture Content (%)	Dry Density (pcf)	Pocket Pen (Tsf)	Torvane (Ksf)	Blows per Foot*	Depth (ft.)	Sampler Type	Graphic Log	
						0			MOTTLED TAN AND RED-BROWN FAT CLAY WITH SAND (CH) Hard, dry @ 2 ft.: Gravels
									MOTTLED RED AND BROWN SANDSTONE, Low hardness, closely fractured, friable, deep weathering
Drill time = 1 min. from 5 to 10 ft.						5			
									LIGHT GRAY GREENSTONE, Moderately hard, moderately fractured, moderately strong, deep weathering
Drill time = 1.1 min. from 10 to 15 ft.						10			
						15			
Drill time = 1.25 min. from 20 to 23.5 ft.						20			@ 20 ft.: DARK GRAY and harder drilling. Very hard drilling from 20 to 24 ft.
Drill time = 2 min. from 23.5 to 24 ft.									
									Bottom of boring at 24 ft. Boring was backfilled with bentonite hole plug. No groundwater encountered.

GEOTECH BORING NEW MACTEC 4096064633_SCVWD-CREEK.GPJ GEOTECH.GDT 10/27/06

MACTEC

Log of Boring Site-2

Permanente Creek Planning Study
Santa Clara County, California

FIGURE
7

DRAWN	JOB NUMBER	CHECKED	CHK'D DATE	APPROVED	CHK'D DATE
cn	4096064633 03		10/06		10/27/06

Page 1 of 1

UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2488-93

MAJOR DIVISIONS			SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS OVER 50% RETAINED ON No.200 SIEVE SIZE	GRAVELS MORE THAN 1/2 OF COARSE FRACTION RETAINED ON No.4 SIEVE SIZE	CLEAN GRAVELS WITH LESS THAN 5% FINES	GW	Well-graded gravels or gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
		GRAVELS WITH OVER 15% FINES	GM	Silty gravels, gravel-sand-silt mixtures
			GC	Clayey gravels, gravel-sand-clay mixtures
	SANDS MORE THAN 1/2 OF COARSE FRACTION PASSING No.4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 5% FINES	SW	Well-graded sand or gravelly sands, little or no fines
			SP	Poorly graded sands or gravelly sands, little or no fines
		SANDS WITH OVER 15% FINES	SM	Silty sand, sand-silt mixtures
			SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS OVER 50% PASSING No.200 SIEVE SIZE	SILTS & CLAYS LIQUID LIMIT 50% OR LESS		ML	Inorganic silts and sandy or gravelly silts, rock flour
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS & CLAYS LIQUID LIMIT GREATER THAN 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays and silty clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils

▯	NX Core Sampler
◪	SPT Sampler
◨	Modified California Sampler
■	Shelby or Osterberg Sampler
◫	Pitcher Barrel
☒	Grab or Bulk Sample
▼	G.W. measured after water level stabilizes
▽	G.W. measured during or soon after drilling
Perm	Permeability
Consol	Consolidation
LL	Liquid Limit (%)
PI	Plasticity Index (%)
EI	Expansion Index (%)
Gs	Specific Gravity
MA	Particle Size Analysis
200=55%	Percent Passing No. 200 Sieve

Shear Strength (psf) ↓ ↓ Confining Pressure

TxUU (FM) or (S)	3200	(2600)	-Unconsolidated Undrained Triaxial Shear (field moisture or saturated)
TxCU (P)	3200	(2600)	-Consolidated Undrained Triaxial Shear (with or without pore pressure measurement.)
TxCD	3200	(2600)	-Consolidated Drained Triaxial Shear
SSCU (P)	3200	(2600)	-Simple Shear Consolidated Undrained (with or without pore pressure measurement.)
SSCD	3200	(2600)	-Simple Shear Consolidated Drained
DSCD	2700	(2000)	-Consolidated Drained Direct Shear
UC	470		-Unconfined Compression
LVS	700		-Laboratory Vane Shear

KEY TO TEST DATA

Source: ASTM D 2488-93, based on Unified Soil Classification system

SOIL CLASS GEOTECH MACTEC 4096064633 SCVWD-CREEK.GPJ GEOTECH.GDT 10/27/06

MACTEC

Soil Classification Chart and Key to Test Data

Permanente Creek Planning Study
Santa Clara County, California

FIGURE
8

DRAWN	JOB NUMBER	CHECKED	CHCK'D DATE	APPROVED	APPRV'D DATE
PCB	4096064633 03		10/06	DWR	10/27/06

I CONSOLIDATION OF SEDIMENTARY ROCKS; usually determined from unweathered samples. Largely dependent on cementation.

U = unconsolidated
F = poorly consolidated
M=moderately consolidated
W = well consolidated

II BEDDING OF SEDIMENTARY ROCKS

Splitting Property	Thickness	Stratification
Massive	Greater than 4.0 ft.	very thick bedded
Blocky	2.0 to 4.0 ft.	thick-bedded
Slabby	0.2 to 2.0 ft	thin bedded
Flaggy	0.05 to 0.2 ft.	very thin-bedded
Shaly or platy	0.01 to .05 ft.	laminated
Papery	less than 0.01 ft.	thinly laminated

III FRACTURING

Intensity	Size of Pieces in Feet
Very little fractured	Greater than 4.0
Occasionally fractured	1.0 to 4.0
Moderately fractured	0.5 to 1.0
Closely fractured	0.1 to 0.5
Intensely fractured	0.05 to 0.1
Crushed	Less than 0.05

IV HARDNESS

1. Soil - Reserved for plastic material alone
2. Low hardness - can be gouged deeply or carved easily with a knife blade
3. Moderately hard - can be readily scratched by a knife blade: scratch leaves a heavy trace of dust and is readily visible after the Powder has been blown away.
4. Hard - can be scratched with difficulty; scratch produces little powder and is often faintly visible
5. Very hard - cannot be scratched with knife blade: leaves a metallic streak

V STRENGTH

1. Plastic or very low strength
2. Friable - crumbles easily by rubbing with fingers
3. Weak - An unstructured specimen of such material will crumble under light hammer blows,
4. Moderately strong - Specimen will withstand a few heavy hammer blows before breaking.
5. Strong - Specimen will withstand a few heavy ringing hammer blows and will yield with difficulty only dust and small flying fragments.

VI WEATHERING - The physical and chemical disintegration and decomposition of rocks and minerals by natural processes such as oxidation, reduction, hydration, solution, carbonation, and freezing and thawing.

D. Deep - Moderate to complete mineral decomposition: extensive disintegration: deep and thorough discoloration, many fractures, all extensively coated or filled with oxides, carbonates and/or clay or silt.

M. Moderate - Slight change or partial decomposition of minerals: little disintegration; cementation little to unaffected. Moderate to occasionally intense discoloration. Moderately coated fractures.

L. Little No megascopic decomposition of minerals; little or no effect on normal cementation. Slight and intermittent, or localized discoloration. Few stains on fracture surfaces.

F. Fresh - Unaffected by weathering agents. No disintegration or discoloration. Fractures usually less numerous than joints.

- ▨ ANDESITE, BASALT, RHYOLITE
- ▨ CHERT
- ▨ CONGLOMERATE
- ▨ GRAYWACKE
- ▨ LIMESTONE, CORAL
- ▨ SANDSTONE
- ▨ SCHIST
- ▨ SERPENTINE
- ▨ SHALE
- ▨ SILTSTONE, MUDSTONE, CLAYSTONE
- ▨ TUFF

ROCK PROPERTIES.DWG 1.0
20061027.1010

MACTEC

Physical Properties Criteria for Rock Classification
Permanente Creek Planning Study
Santa Clara County, California

FIGURE
9

DRAWN	JOB NUMBER	CHECKED	CHECKED DATE	APPROVED	APPROVED DATE
CN	4096064633 03		1/06		10/27/06